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EXAMINER

MOORE, IAN N

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/773,194

Applicant(s)

BABU ET AL.

Examiner

Ian N Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.6.8.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double-spaced are required.

### *Claim Objections*

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims **22-32** have been renumbered as **23-33**, respectively.

3. **Claim 4** recites, "...XML..." in line 2. It is suggested to describe the acronym when appearing for the first time in the claims.
4. **Claim 23** (previously labeled as claim 22) is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Note that claim 23 depends on claim 10 and 6. In fact, **claim 23 is identical to claim 6.**

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 6, 11, 17,23, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 6** recites, "...**organized by user**..." in line 4. It is unclear who the user is and who is organizing it. In particular, it is unclear whether user is

A) a person who is collecting the location data (i.e. network operator, system administrator),

or

B) a person whose name/number is stored in the location collections (i.e. a subscriber).

Or,

C) the collected data is organized by the user's attributes (i.e. name/number/ID).

*This is what*

**Claims 11, 17, 23 and 29** are also rejected for the same reason as stated above.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claims 1, 2,5,7,10,12,13,16,18,21,24, 25,28,30 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Fitch (U.S. 6,321,092).

**Regarding Claims 1, 12 and 24**, Fitch'092 discloses a method for aggregating location information, said method comprising: *multi*  
acquiring location data (see FIG. 1, Location Finding System, LFS, 116; or see FIG. 2, a combined system of Location Finding Center, LFC<sub>1 to n</sub>, and LFS/location Manager 214; see col. 7, lines 52-55) regarding a user (see FIG. 1, a user of the Wireless Station 102) from a plurality of location sources (see FIG. 1, wireless stations communicating with the corresponding Location Finding Equipment Systems, LFE, 104,106,108 and 110; of see FIG. 2, LFE<sub>1 to n</sub>); see col. 5, lines 1-30, 56-61; see col. 6, lines 19-21; note that Location Finding System finds/acquires and receives regarding a particular wireless station user location from a plurality of LFE/wireless stations);  
and creating a collection of said location data regarding said user (see col. 3, lines 25-47; see col. 7, lines 30-57; note that the combined system of LFCs and LFS collects the raw wireless station user location data received from LFEs and aggregates/creates a standard format).

**Regarding Claims 2, 7, 13, 18, 25, and 30**, Fitch'092 discloses converting said location data from said location sources to a single format (see FIG. 5, collection data from regions 502 and 503 are combined/aggregated; see col. 9, lines 55 to col. 10, lines 5; see col. 7, lines 41-44, 55-67 and col. 8, lines 7; note that aggregated/combined location data from LFEs are converted into a standard/signal format).

**Regarding Claims 5, 10, 16, 21, 28 and 33, Fitch'092 discloses wherein said location data are updated continuously (see col. 11, lines 9-30; note that location data from a wireless station is continuously/on-going monitored and updated in order to obtain the most accurate location (i.e. tacking 911 call location)).**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch'092 in view of Wang (U.S. US 2002/0160745A1).

**Regarding claims 3, 14 and 26, Fitch'092 discloses said location sources, and said single format as described above in claim 1, 12 and 24.**

**Fitch'092 does not explicitly disclose wherein a two-way pager (see Wang'745 FIG. 2, Pager 32; see page 4, paragraph 58), and said single format is one implemented in XML (see Wang'745 FIG. 14, HTTP (XML) 198 and 188 formats; see page 10, paragraph 127-131; note that WML 194 is converted into a single XML format 198).**

However, the above-mentioned claimed limitations are taught by Wang'745. In view of this, having the system of Fitch'092 and then given the teaching of Wang'745, it would

have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fitch'092, for the purpose of providing a two-way pager and a converting into a XML format, as taught by Wang'745, since Wang'745 states the advantages/benefits at page 1, paragraph 11-15 that it would provide network-independent location aware protocol which is useable over a large variety of location-aware networks and on a large variety of location-aware wireless mobile devices. The motivation being that by utilizing XML, it will increase the usability of location aware mobile since XML is widely used.

8. Claims 4, 15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch'092 and Wang (U.S. US 2002/0160745A1), and further in view of well-established teaching in art.

**Regarding claims 4, 15 and 27**, Fitch'092 discloses said location sources, and said single format as described above in claim 1, 12 and 24.

Fitch'092 does not explicitly disclose wherein a wireless LAN (**see Wang'745 FIG. 16, Wireless LAN 220 and access point devices 222; see page 12, paragraph 145**), and said single format is one implemented in XML (**see Wang'745 FIG. 14, HTTP (XML) 198 and 188 formats; see page 10, paragraph 127-131; note that WML 194 is converted into a single XML format 198**).

However, the above-mentioned claimed limitations are taught by Wang'745. In view of this, having the system of Fitch'092 and then given the teaching of Wang'745, it would have been obvious to one having ordinary skill in the art at the time the invention was made

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to modify the system of Fitch'092, for the purpose of providing a two-way pager and a converting into a XML format, as taught by Wang'745, since Wang'745 states the advantages/benefits at page 1, paragraph 11-15 that it would provide network-independent location aware protocol which is useable over a large variety of location-aware networks and on a large variety of location-aware wireless mobile devices. The motivation being that by utilizing XML, it will increase the usability of location aware mobile since XML is widely used.

Neither Fitch'092 nor Wang'745 explicitly disclose a hub. However, the above-mentioned claimed limitations are taught by well-established teaching in art. **Note that Wang'745 teaches a wireless LAN. It is well known in the art in the wireless LAN can be implemented with a hub/router (i.e. wireless LAN hub/router).**

In view of this, having the combined system of Fitch'092 and Wang'745, and then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Fitch'092 and Wang'745, for the purpose of providing a wireless LAN hub, as taught by well established teaching in art. The motivation being that by providing a wireless LAN hub/router in the network, it can increase network performance and integration since plurality of devices in the wireless LAN can be integrated/accessed/hub/routed through a wireless LAN hub/router.

9. Claim 6, 17, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch'092 in view of Morse (U.S. 6,609,004).



**Regarding claims 6, 17, 23 and 29**, Fitch'092 discloses acquiring location data regarding the user and; creating collections of said location data regarding a user as described above in claims 1, 12 and 24. Fitch'092 further discloses acquiring location data regarding more than one user (see col. 11, lines 60 to col. 12, lines 12; note that during the pulling process, the LFS/LM query the location data regarding all wireless stations user).

Fitch'092 does not explicitly disclose collections of said location data regarding more than one user, organized by user (**see Morse'004 FIG. 4, Server User Memory 116 is created by the collection of the location data regarding more than one user, and the memory/collection is organized by user (i.e. organized as user 1 to user N corresponding to their respective locations); see col. 7, lines 55 to col. 8, lines 5).**

However, the above-mentioned claimed limitations are taught by Morse'004. In view of this, having the system of Fitch'092 and then given the teaching of Morse'004, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fitch'092, for the purpose of providing a memory that collected and stored the location data regarding more than one user, and the memory is organized by user, as taught by Morse'004, since Morse'004 states the advantages/benefits at col. 1, lines 25-30, col. 2, lines 15-20 that it would provide to easily locate a device user in case of an emergency situation, and easily select relevant content information from the large amount of data. The motivation being that by collecting/storing the location data regarding more than one user and organized by user, it will increase the possibility of easily retrieving and identifying the user from large amount of stored data, and locating the user in case of an emergency.

10. Claims 8, 19, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch'092 and Morse'004, and further in view of Wang (U.S. US 2002/0160745A1).

**Regarding claims 8, 19 and 31**, the combined system of Fitch'092 and Morse'004 discloses said location sources, and said single format as described above in claim 1, 12 and 24.

Neither Fitch'092 nor Morse'004 explicitly discloses wherein a two-way pager (see **Wang'745 FIG. 2, Pager 32; see page 4, paragraph 58**), and said single format is one implemented in XML (see **Wang'745 FIG. 14, HTTP (XML) 198 and 188 formats; see page 10, paragraph 127-131; note that WML 194 is converted into a single XML format 198**).

However, the above-mentioned claimed limitations are taught by Wang'745. In view of this, having the combined system of Fitch'092 and Morse'004, and then given the teaching of Wang'745, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Fitch'092 and Morse'004, for the purpose of providing a two-way pager and a converting into a XML format, as taught by Wang'745, since Wang'745 states the advantages/benefits at page 1, paragraph 11-15 that it would provide network-independent location aware protocol which is useable over a large variety of location-aware networks and on a large variety of location-aware wireless mobile devices. The motivation being that by utilizing XML, it will increase the usability of location aware mobile since XML is widely used.

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11. Claims 9, 20 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch'092, Morse'004, Wang (U.S. US 2002/0160745A1), and further in view of well-established teaching in art.

**Regarding claims 9,20, and 32**, the combined system of Fitch'092 and Morse'004 discloses said location sources, and said single format as described above in claim 1, 12 and 24.

Neither Fitch'092 nor Morse'004 explicitly discloses wherein a wireless LAN (see **Wang'745 FIG. 16, Wireless LAN 220 and access point devices 222; see page 12, paragraph 145**), and said single format is one implemented in XML (see **Wang'745 FIG. 14, HTTP (XML) 198 and 188 formats; see page 10, paragraph 127-131; note that WML 194 is converted into a single XML format 198**).

However, the above-mentioned claimed limitations are taught by Wang'745. In view of this, having the combined system of Fitch'092 and Morse'004, and then given the teaching of Wang'745, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Fitch'092, for the purpose of providing a two-way pager and a converting into a XML format, as taught by Wang'745, since Wang'745 states the advantages/benefits at page 1, paragraph 11-15 that it would provide network-independent location aware protocol which is useable over a large variety of location-aware networks and on a large variety of location-aware wireless mobile devices. The motivation being that by utilizing XML, it will increase the usability of location aware mobile since XML is widely used.

Neither Fitch'092, Morse'004, nor Wang'745 explicitly disclose a hub. However, the above-mentioned claimed limitations are taught by well-established teaching in art. **Note that Wang'745 teaches a wireless LAN. It is well known in the art in the wireless LAN can be implemented with a hub/router (i.e. wireless LAN hub/router).**

In view of this, having the combined system of Fitch'092, Morse'004 and Wang'745, and then given the teaching of well established teaching in art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Fitch'092, Morse'004 and Wang'745, for the purpose of providing a wireless LAN hub, as taught by well established teaching in art. The motivation being that by providing a wireless LAN hub/router in the network, it can increase network performance and integration since plurality of devices in the wireless LAN can be integrated/accessed/hub/routed through a wireless LAN hub/router.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch (U.S. 6,424,840) in view of Fitch'092.

**Regarding claim 22**, Fitch'840 discloses an information handling system for aggregating location information (see **FIG. 2, Location Based Zone and the assignment system 52**), said information handling system comprising:

a communication device (see **FIG. 3, I/O device 60; Input portion of I/O device 60 towards the a wireless network**) communicating with a network (see **FIG. 2, Wireless communication network 51**); see col. 6, lines 51-65;

a storage device (see **FIG. 3, Memory 102**);

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an output device (see FIG. 3, I/O device 60; an output portion of the device)

a system bus (see FIG. 3, the connection bus between Processor, I/O device and memory); and

a processor (see FIG. 3, Processor 100), coupled by said system bus to said communication device, said storage device, and said output device (see FIG. 3, processor couples to I/O device 98 and Memory 102 via the buses);

said processor programmed to implement a method (see FIG. 4 and 5, the processor process the methods in FIG. 4 and 5); see col. 11, lines 30-65.

Fitch'840 does not explicitly disclose acquiring location data (see Fitch'092 FIG. 1, Location Finding System, LFS, 116; or see FIG. 2, a combined system of Location Finding Center, LFC<sub>1 to n</sub>, and LFS/location Manager 214; see Fitch'092 col. 7, lines 52-55) regarding a user (see Fitch'092 FIG. 1, a user of the Wireless Station 102) from a plurality of location sources (see Fitch'092 FIG. 1, wireless stations communicating with the corresponding Location Finding Equipment Systems, LFE, 104,106,108 and 110; of see FIG. 2, LFE<sub>1 to n</sub>); see Fitch'092 col. 5, lines 1-30, 56-61; see Fitch'092 col. 6, lines 19-21; note that Location Finding System finds/acquires and receives regarding a particular wireless station user location from a plurality of LFE/wireless stations);

converting said location data from said location sources to a single format (see Fitch'092 FIG. 5, collection data from regions 502 and 503 are combined/aggregated; see Fitch'092 col. 9, lines 55 to col. 10, lines 5; see Fitch'092 col. 7, lines 41-44, 55-67 and col. 8, lines 7; note that aggregated/combined location data from LFEs are converted into a standard/signal format);

and creating a collection of said location data regarding said user (see **Fitch'092 col. 3, lines 25-47; see col. 7, lines 30-57; note that the combined system of LFCs and LFS collects the raw wireless station user location data received from LFEs and aggregates/creates a standard format).**

and updating said location data continuously (see **Fitch'092 col. 11, lines 9-30; note that location data from a wireless station is continuously/on-going monitored and updated in order to obtain the most accurate location (i.e. tacking 911 call location)).**


However, the above-mentioned claimed limitations are taught by Fitch'092. In view of this, having the system of Fitch'840 and then given the teaching of Fitch'092, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Fitch'840, for the purpose of providing mechanism for aggregating multiple location data into a combined location data, as taught by Fitch'092, since Fitch'092 states the advantages/benefits at col. 2, lines 41 that it would reduce location uncertainty by allowing multiple inputs from one ore more wireless source and their corresponding LFE and aggregate the location data. The motivation being that by combing/aggregating multiple location data regarding the mobile station user into a single standard format, it can accurately track the mobile user location thereby reducing location uncertainty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 703-605-1531. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 703-308-7828. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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6/16/04



**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**